

IN THE ABSTRACT:

For the purpose of reducing the size and power consumption of a power source in an ultrasonic diagnostic apparatus, charge pump circuits 50 and 60 are connected to a transmitter power source 14. A regulator in the transmitter power source 14 drives the charge pump circuit 50 to generate a positive bias voltage +HV2 higher than a positive voltage +HV1 generated by the transmitter power source 14. The regulator in the transmitter power source 14 also drives the charge pump circuit 60 to generate a negative bias voltage -HV2 lower than a negative voltage -HV1 generated by the transmitter power source 14.